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ABSTRACT

This workbook explains the principles and benefits of the integrative learning model and outlines a systems approach to developing an integrated learning-based education/training program. First, the integrative learning model is discussed in the contexts of the shift from teaching-focused to learning focused education and client-based environments and the increasing emphasis on investment priority decisions. Discussed next is the integrative learning model. In this model, a five-step reflective learning process (do, look, think, probe value, plan) is used to integrate new information, experiences, and perspectives into existing life experience and apply new and existing knowledge/skills to accelerate individual and organizational performance change. In the second half of the workbook, a systems approach to integrative learning design is presented that entails using a 10-step transforming process to transform inputs (needs as perceived by stakeholders) into desired outputs (task/learning outcomes). The 10 steps of the transforming process, which are repeated a minimum of three times (each time incorporating feedback), are as follows: determine learning outcomes; identify activities required; plan continuous learning; select relevant context; identify overall goal; determine task outcomes; establish benchmark standards; plan support; build support; and practice facilitating learning experience. Contains 12 references. (MN)

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Integrative Learning

Conceptual Design "Jump-Start" Workbook

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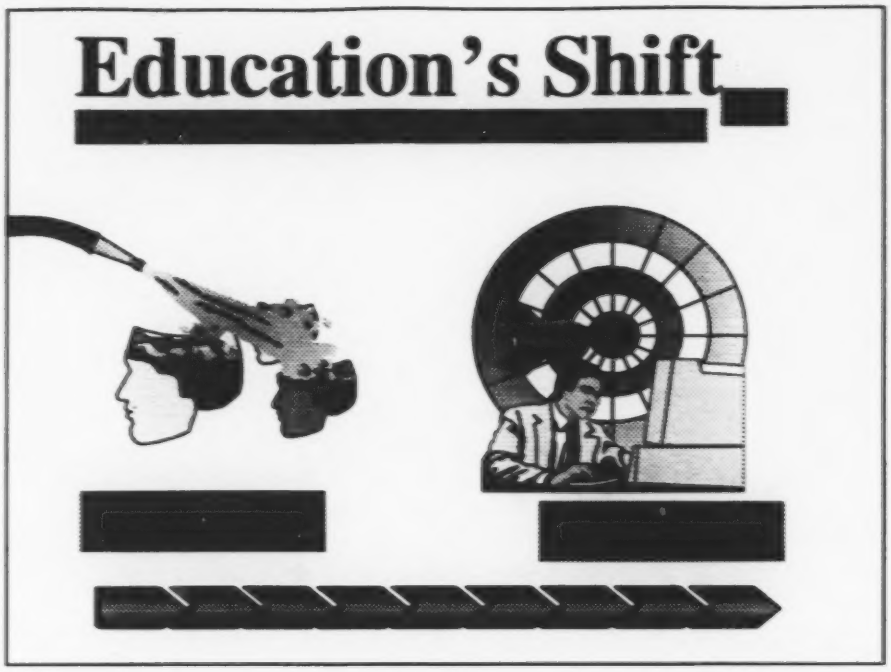


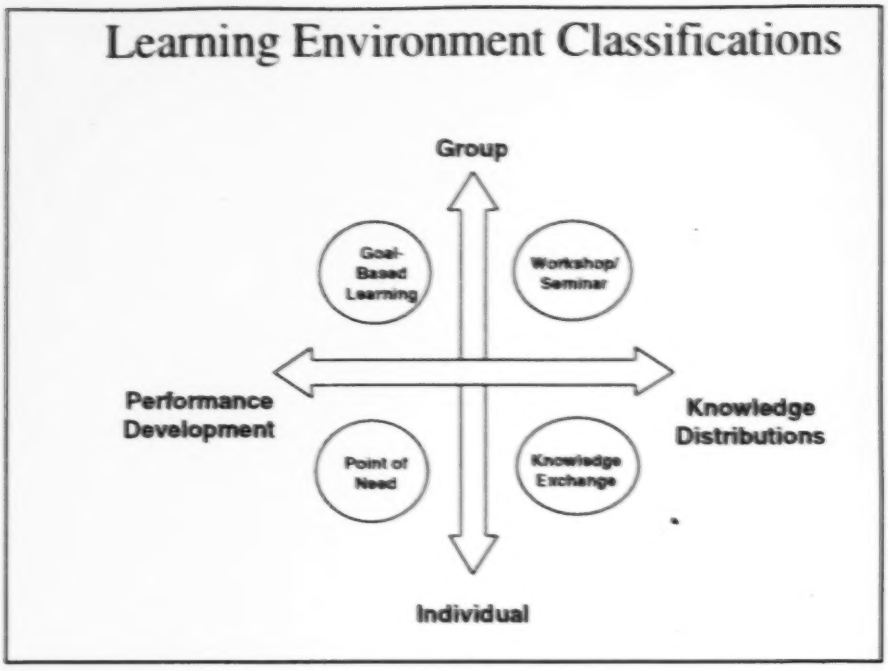
- Learning involves the integration of new ideas, information, and habits with life experience (both on and off the job).
- The on-going shift in focus is from Teaching-Focused Education to Learning-Focused Education. The goal is to assist the learner to be a skilled professional, able to cope with continuous change.
- In teaching-focused education, the instructor is the fire hose, knowledge and information is the water, and the learners are to open their empty heads and receive from the fire hose. In learning-focused education, learners are expected to use the resources provided to build on their integrated life experience and develop the skills needed to be successful on the job.
- Teaching-focused environments are characterized by "pushing" information at the learner and emphasizing exposure and delivery and "surface" structure that supports the delivery of the information. Learning-focused environments are characterized by supporting the learners to "pull" what they need to be successful on the job. They are characterized by an "internal" structure that supports each learner in building needed knowledge and skill.

Consequences of Focus Shift

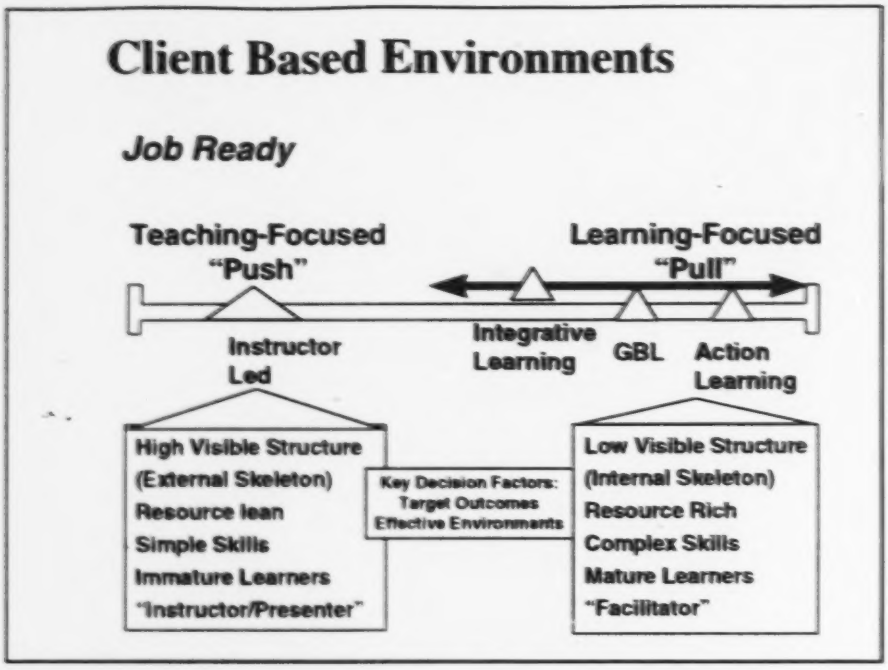
Andersen Consulting Education

	Teaching-Focus	Learning-Focus
Focus	Faculty	**Learners**
Learners	Mostly Passive	**Mostly Active**
Learning	Faculty Responsible Context-Independent Retention	**Jointly Responsible** **Context-Related** **Reflection/Application**
Faculty Roles	Experts Good Presenters	**Coaches/Facilitators**
Outcomes	Product/Solution "Tool kit"	**Process/Learning** **Increased Skill in Applying Tools**

- Learning involves the integration of new ideas, information, and habits with life experience (both on and off the job).
- The learning-focused approach above involves more engagement by the learner in activities designed to support learning and transfer of learning to the job.



- Integrative learning environments may be goal-based as well as accommodating other types of learning. Workshops are now being developed using an Integrative Learning approach.
- Point of Need training is frequently supported by computerized multi-media platforms and frequently use goal-based learning approaches.
- "Knowledge Exchange" refers to the Andersen Consulting network of databases by which our knowledge capital is collected, maintained, and grown.



- In many client situations, the goal is for the learners to be "job ready" at the conclusion of their learning experience. (This will translate on the Personal Change Curve to a point somewhere between Level 3 (Learn--I can do it with help) and Level 4 (Practice--I can do it when I think about it.) (More about the Personal Change Curve later in this presentation.) Integrative Learning comes from the Learning-Focused paradigm and is flexible in movement along the line between teaching-focused and learning-focused education environments. GBL, Action Learning, and Instructor-Led approaches are often more fixed on how they are applied.

- The structure in teaching-focused and learning-focused environments is distinctive. In a teaching-focused environment structure can be represented by a turtle (with an external skeleton that restricts growth, provides protection, and offers little clue as to what is going on inside). Structure in a learning-focused environment can be represented by the human being (with an internal skeleton providing consistent, firm support that can be fleshed out in many ways).

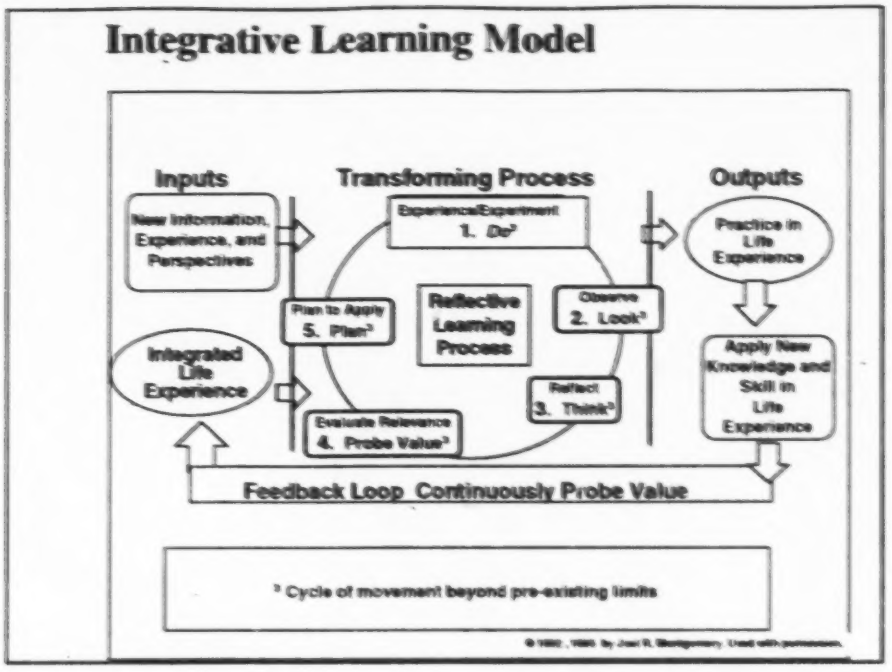
Investment Priority Decisions

- **Target Outcomes (Results--long- and short-term)**
- **Resources - Time, People, Money**
- **Competencies**
- **Values**
- **Technology Support Required**

- In making investment decisions regarding developing performance capabilities, each of these factors plays a vital part.
- If it is important for people to perform differently, then the target outcomes take on a higher priority.
- Using the Personal Change Curve as a benchmark, most teaching-focused programs lead participants to a recognize and explore level on the Personal Change Curve.
- Learning-focused programs can assist participants to move to higher levels on the Personal Change Curve depending on the nature of the target outcomes, the learners, and the learning environment..

- In Learning Focused Education, the vision is different and revolves around what the learner needs to facilitate learning target skills. While a richer environment of learning resources is available, the engagement of the learner in the activity of learning is a primary focus.

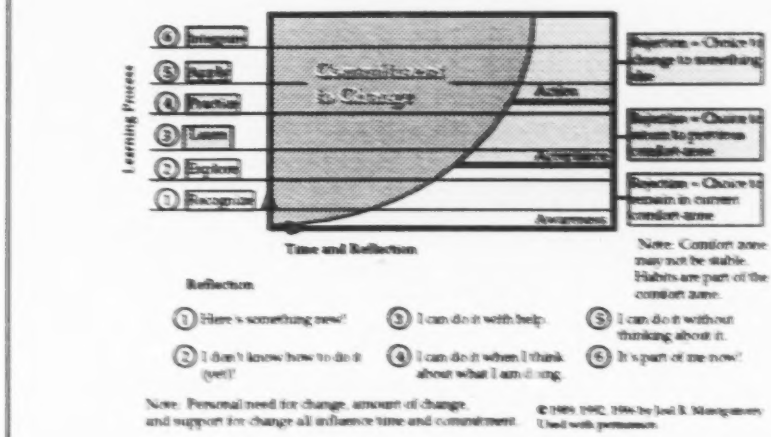
- In the experience of learning, we have found that the learner does not choose to utilize all of the available resources and that, while engaging in the learning and producing what may be needed in the classroom, his skill gets him on the target and he needs more practice on the job to hit consistent bulls eyes.
- This is explained in more detail later in this presentation with the introduction of the Personal Change Curve.



- Each person brings to a new experience the sum total of his/her integrated life experience. As he/she is exposed to new information, experiences, perspectives, technology, ideas, etc..., in order to make the new information useful he/she engages with it in a reflective learning process. The overall purpose of this process is to move beyond pre-existing limits to thought, behavior, perspective, and attitude. This is done by first having an experience that involves the new information, looking at the impact of the new information on the experience, thinking about how it works or how to improve it, probing the value and relevance in life, planning to use it again, then testing it and repeating the cycle to the point that the learner moves beyond pre-existing limits.

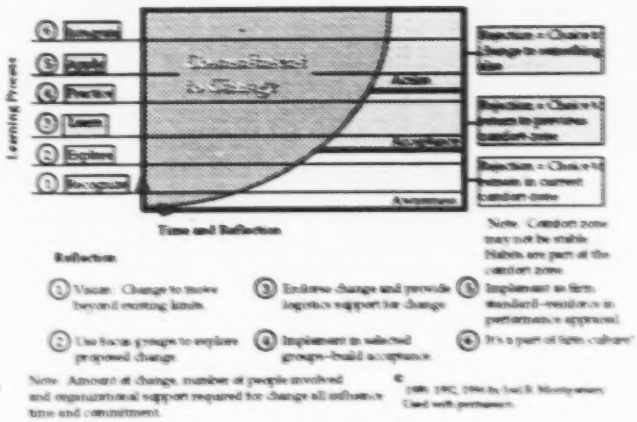
- Once this is done in the learning phase, the new knowledge and skill is tested in life experience. That usually ends any focused learning experience. Over time the learner will apply effective knowledge in life experience and will continually probe its value and effectiveness. When something has proved valuable over time it will be integrated into the overall life experience that is brought forward to every future encounter.

Personal Change Curve

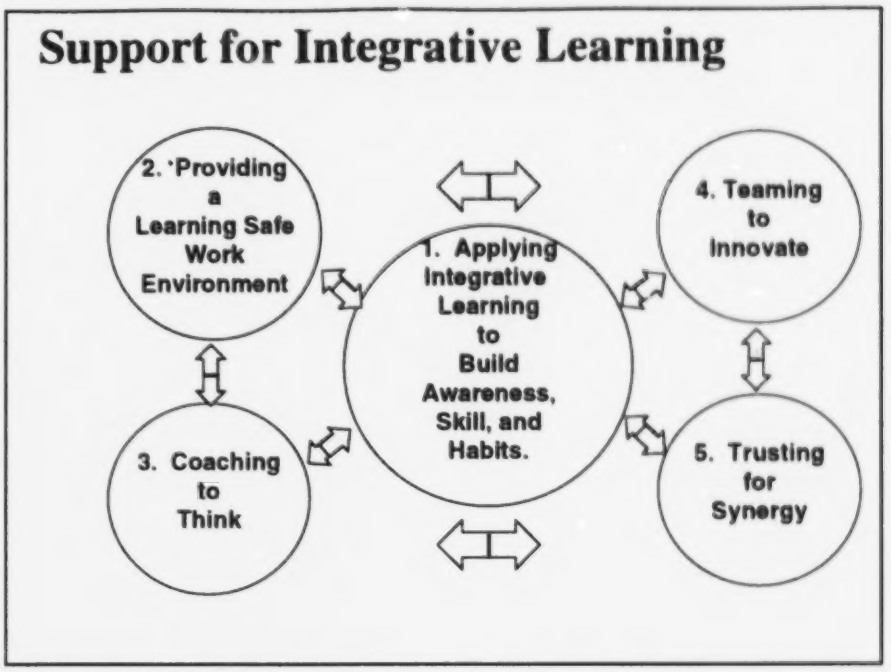

Personal Change Curve
Learning Process
Commitment to Change
Action
Awareness
Time and Reflection
Reflection
Note: Comfort zone may not be stable. Habits are part of the comfort zone.
Note: Personal need for change, amount of change, and support for change all influence time and commitment.

- The Personal Change Curve reflects how individuals move through the process of learning and change. As they pass through the three stages of awareness, acceptance, and action, they are more and more involved with the new information (idea, habit, etc.) and progress through the six levels indicated above.
- Organizations, as collections of individuals, also pass through the same Change Curve, though each level is represented by an organization-wide response rather than an individual response.

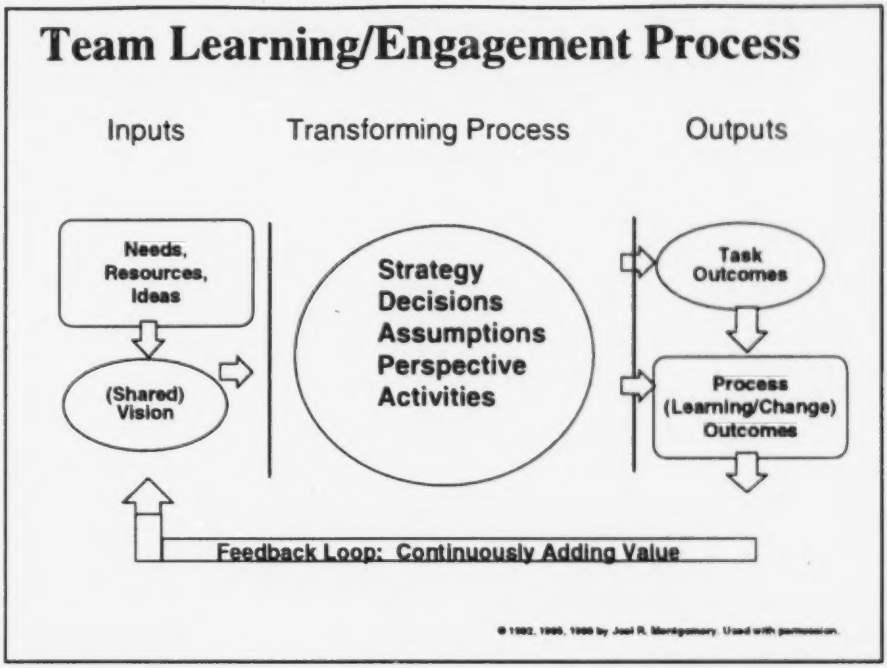
Organizational Change Curve


Organizational Change Curve
Learning Process
Time and Reflection
Action
Awareness
Reflection
Note: Amount of change, number of people involved and organizational support required for change all influence time and commitment.

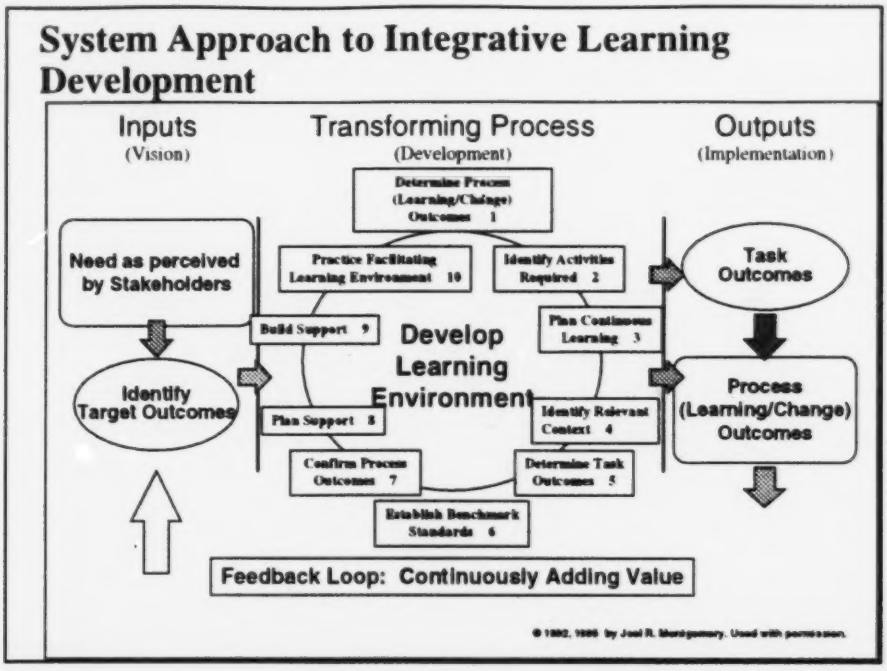
- While this slide depicts the Change Curve from an Organizational perspective, it is also important to note that most learning/training programs are instituted only when an organization has moved to level three (Learn--Endorse the change and provide logistics to support it) in the change process.


Support for Integrative Learning
2. Providing a Learning Safe Work Environment
1. Applying Integrative Learning to Build Awareness, Skill, and Habits.
4. Teaming to Innovate
3. Coaching to Think
5. Trusting for Synergy

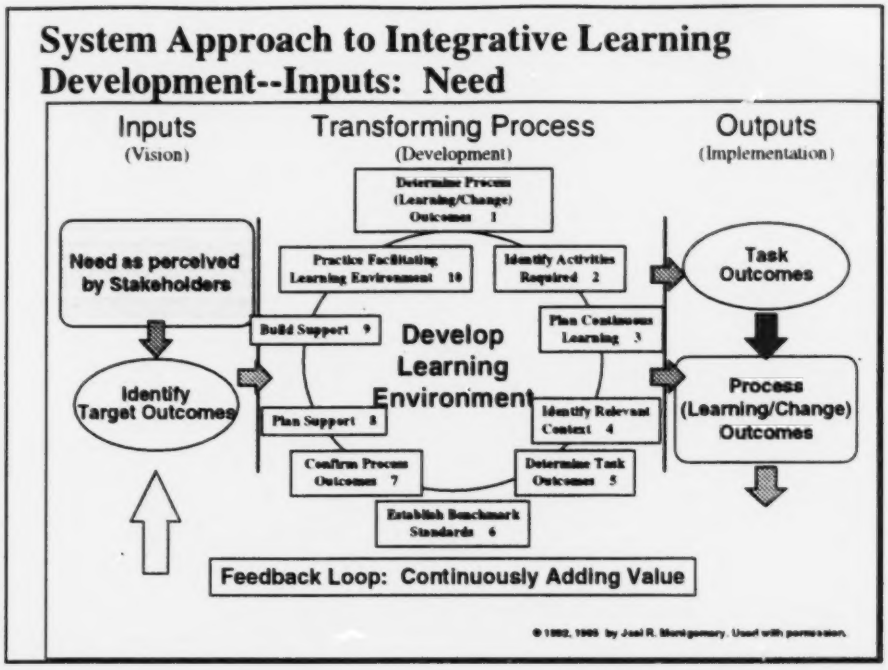
- In creating learning environments supporting of Integrative Learning, these four components have been found to be crucially important. Of these, first in importance is providing a learning safe work environment. Second is to create an atmosphere of trust where learners can risk, grow, and learn from each other. Working in teams (even when task outcomes are normally done alone) provides opportunities to innovate and to work with different perspectives. Coaching (through content/practice coaches and learning/process coaches) is important to encourage learners to make use of resources and to grow beyond pre-existing limits as they engage in their learning experience.



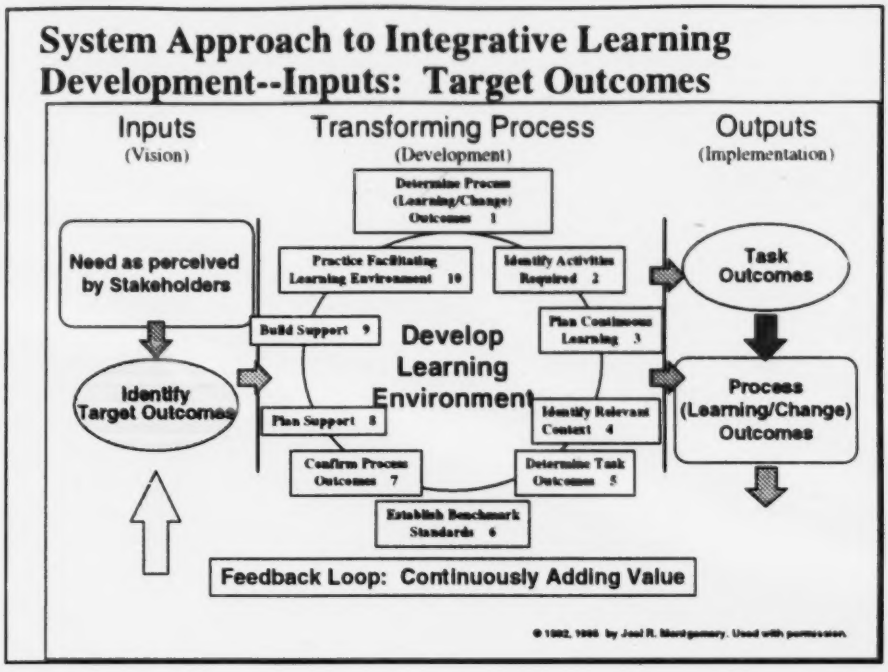
- This is the process that consultants experience on engagements and that learners experience in an Integrative Learning experience, at work in a client environment, in a consulting engagement, and working with family, friends, and co-workers.
- Process outcomes are largely seen as intangible and need special attention during the learning experience so that the learners experience effective knowledge transfer.



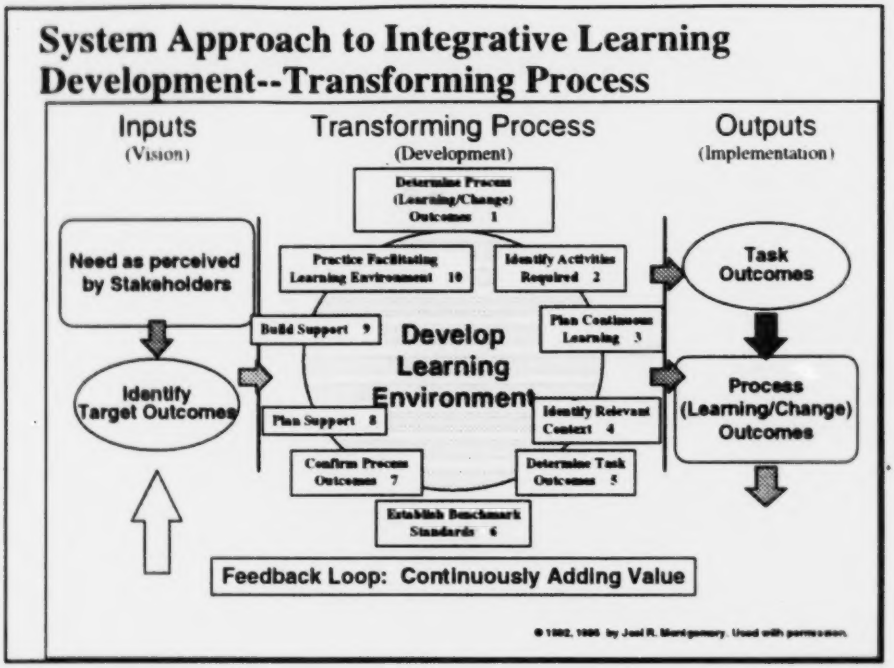
- This does not represent a linear approach to design and development. In working with this system approach, several iterations are required in development of the conceptual design.
- Target Outcomes are frequently revisited as needed as the design progresses.
- In normal circumstances there will be a minimum of three iterations: test of conceptual design, test of the low-fidelity program, and test of the high fidelity program prior to releasing the program for regular use.



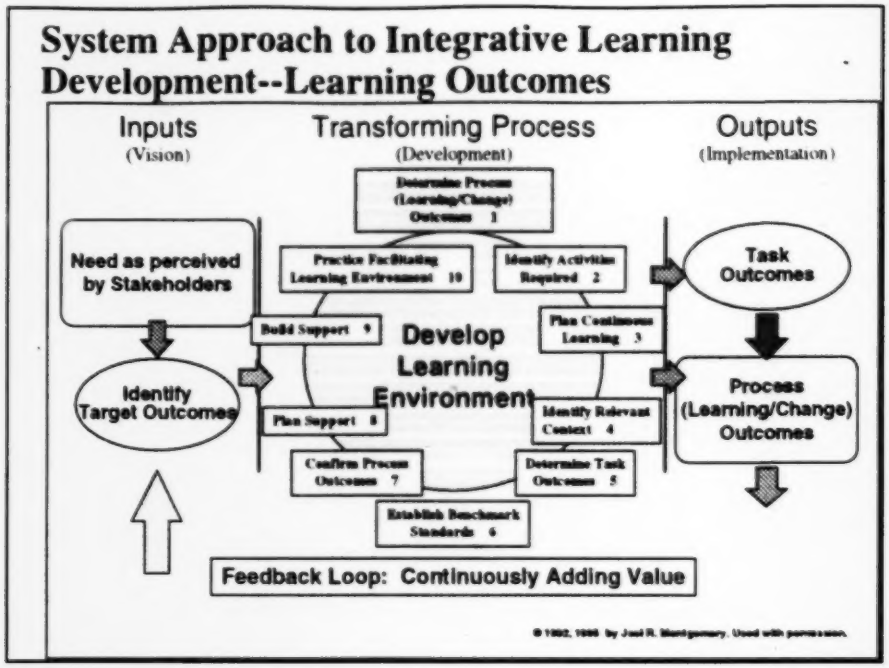
- Stakeholders need to be aware of their investment in the change.
- Ensure all key stakeholder groups are adequately represented.
- Utilize Concept Mapping and Pattern Analysis (or other objective data gathering and analysis approaches) with Stakeholders to identify expectations and to resolve "disconnects."
- Mind-Mapping" and other approaches can also be used to collect and display Stakeholder expectations. The key is to collect them, to display them, and to build consensus about them among the Stakeholders before moving too far in your conceptual design.
- Confirm results with Stakeholders.
- Involve Stakeholders in conceptual design session.



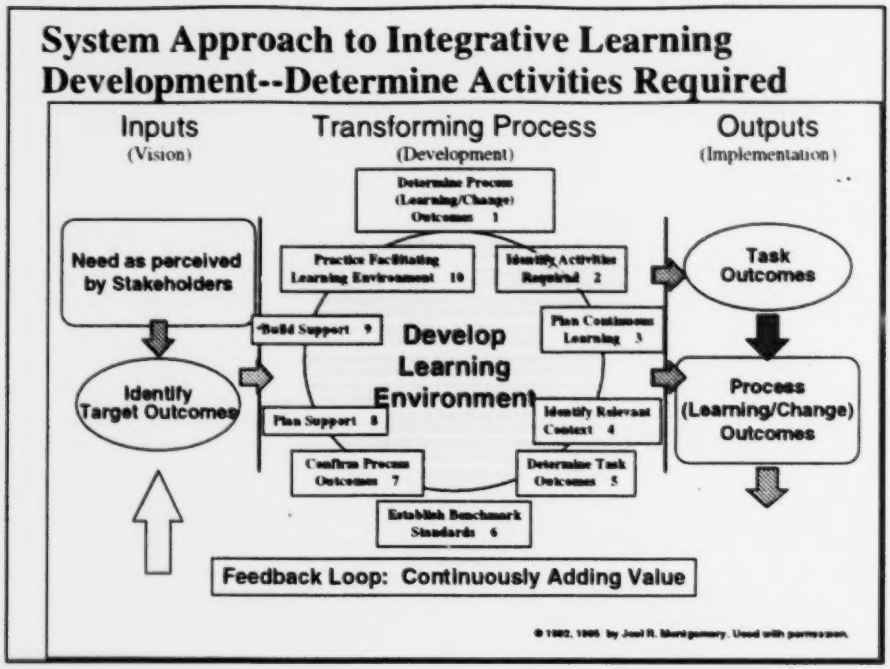
- Target outcomes respond to this question: How will the learners perform differently (be changed) as a result of participating in this learning experience?
- The goal at this point is to transform stakeholder expectations into target outcomes.
- Obtain Stakeholder acceptance of target outcomes and performance expectations (referring to the Personal Change Curve discussed earlier).
- To be effective, learning experiences need to focus on only a handful of significant target outcomes.
- These target outcomes become the "end in mind" and all components of the design revolve around assisting the learners to build necessary learning and skill to accomplish these target outcomes. Anything not directly in support of the target outcomes becomes "out of scope" with regard to the learning design.



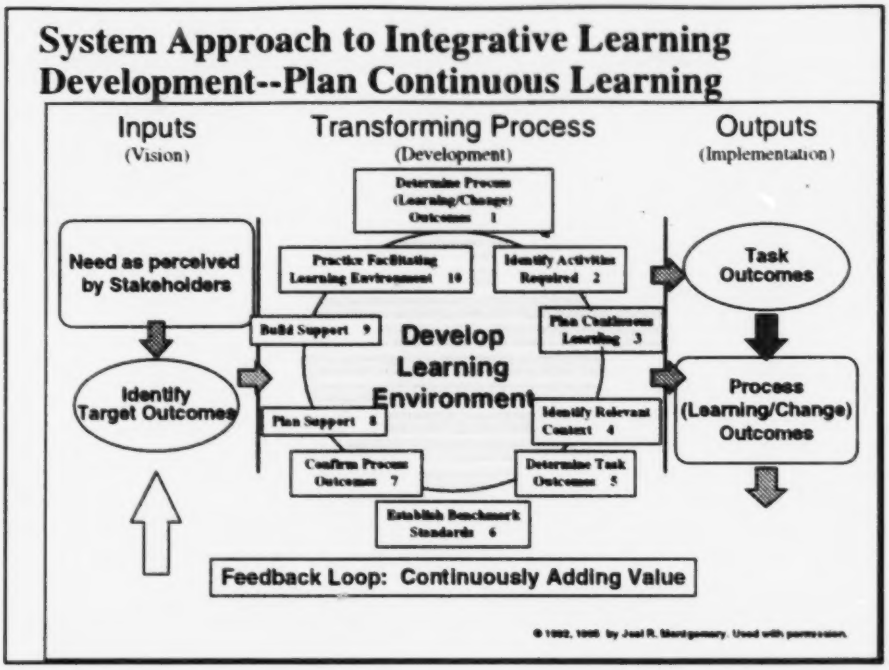
- Key Success Factor: The transforming process is holistic and iterative. In Building the Learning Environment, all components relate to each other and must be revisited when any component changes.
- The experience/process of the development team will mirror the experience/process of the learners.
- As the design evolves through multiple iterations, practice "stage containment" by making sure that the conceptual design is holistic and integrated before moving to new action steps.



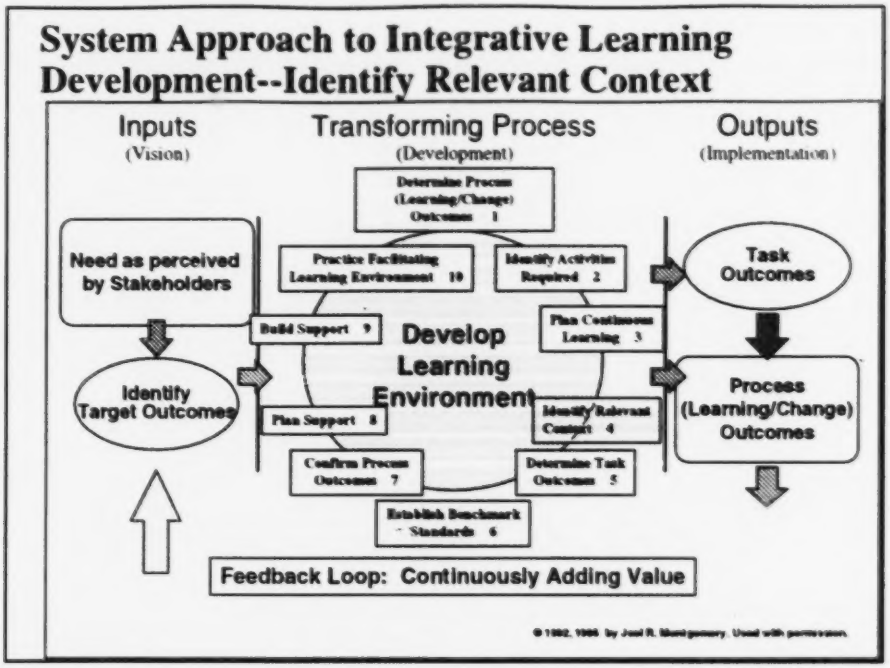
- Definition: Process (Learning/Change) Outcomes are the on-going competencies and habit changes the learners build and practice during the learning experience.
- Target outcomes may become learning outcomes if the learner needs to practice working with this performance during the learning experience. In that case, the distinction between a target outcome and a learning outcome will be the level on the Personal Change Curve at which the skill is practiced, with the higher levels identified as the target outcome.
- By engaging in the learning experience, learners actively build skills and knowledge, adding to their integrated life experience.
- There is not a one-to-one relationship between target outcomes and process outcomes. Sometimes several process outcomes are required to achieve one target outcome. Sometimes one process outcome can contribute to the achievement of several target outcomes.



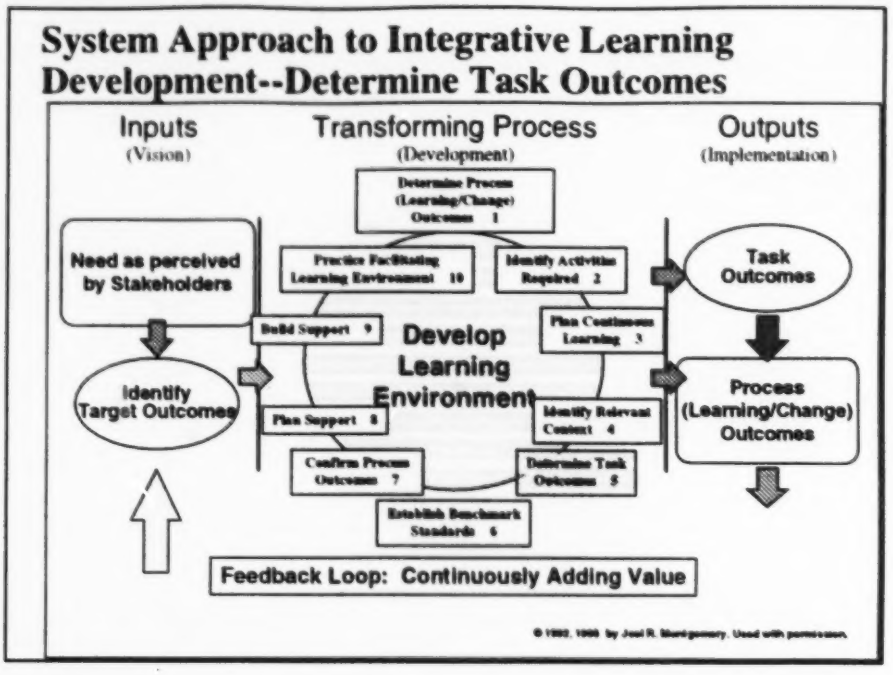
- These activities respond to the question: "What do the learners need to do to accomplish the desired process (learning/change) outcomes?" These are the detailed activities the learners perform and repeat to build awareness, skill, and habits.
- It is important to keep asking, "Is there any natural sequence of activities that needs to be supported?"
- How can the activities work together?
- What context is needed to make the activities feel natural to the learners?



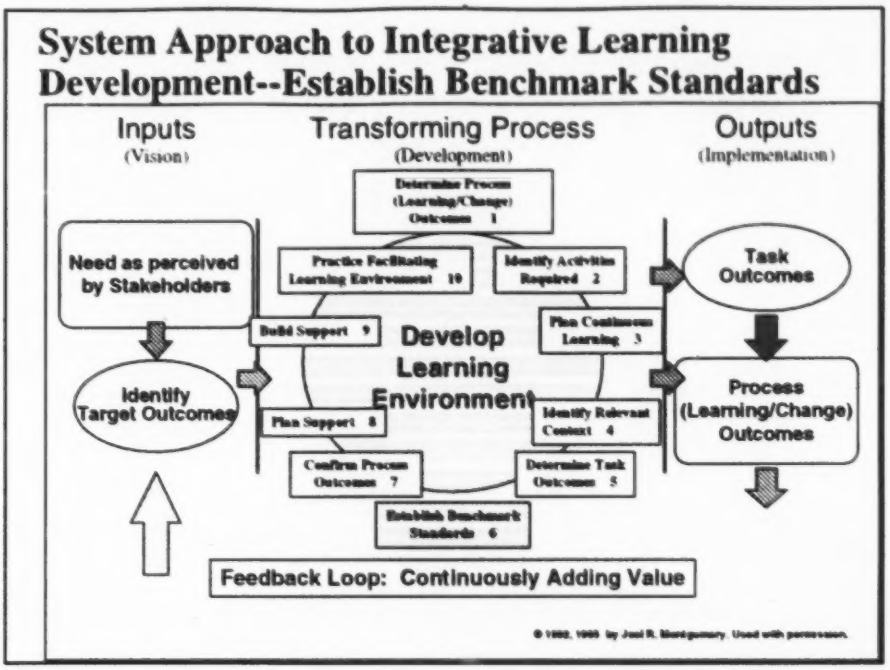
- Learning and reflection on performance are frequently a part of sports (golf, darts, swimming, etc.) This concept can be used to introduce this strategy as a work habit as well. Placing a continuing focus on learning allows the meaning and importance to emerge from the experience.
- By actively monitoring the steps taken and the decisions involved in producing the task outcomes, learners become aware of how to create new and better task outcomes in the future.
- By focusing on how their work progresses, learners develop insight into effective strategies for their jobs.
- A pattern has emerged to make continuous learning seem more natural: Look at a background (a challenge/idea/discovery/experience); then draw some "lessons learned" (aha's, reminders, new learning); then develop an action plan (best personal practice going forward) (stating "what I plan to do with what I learned.").
- Learning Coaches are frequently required to make this focus on learning a part of the whole learning experience.
- Key points to keep in mind: How are learners supported in tracking their decisions and consequences of these decisions? How are learners encouraged to learn from mistakes and to plan more effective alternatives?



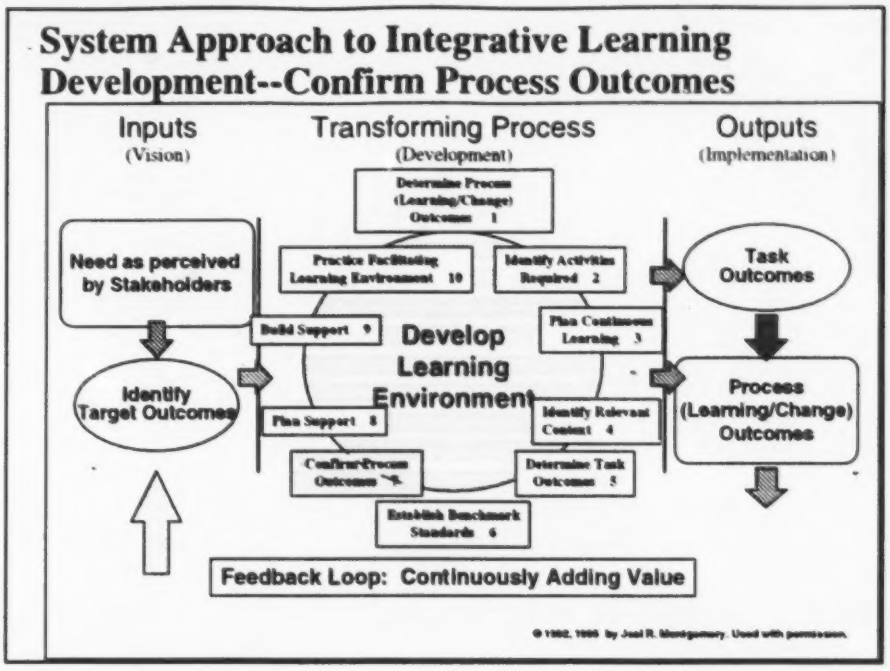
- Providing a "learning safe," "authentic" context allows the learners to transfer learning and habits to their work environments.
- A key concern is to know use the context in which learners will be applying the target outcomes.
- What needs to happen to make the context "learning safe?"
- How "authentic" does the context need to be to support accomplishment of target outcomes?
- What support is/needs to be available in the "authentic" context?



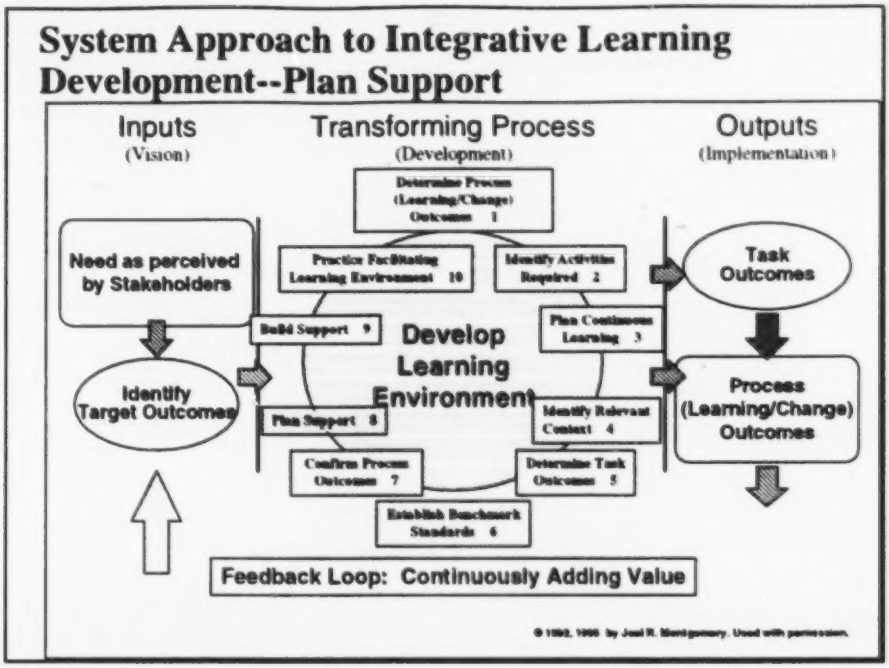
- Task outcomes are the logical consequences (outputs) of engaging in the (learning) activities in the relevant context.
- Task outcomes need to be clear, plausible, and consistent with the context. Progress toward the task outcomes as well as their accomplishment need to be obvious to the learners.
- Task outcomes can be authentic products for reuse outside the learning environment (drafts, job aids, presentations for audiences, etc...)
- Task outcomes need to be reviewed by the learner during and after the production process to lead to accomplishment of process outcomes.



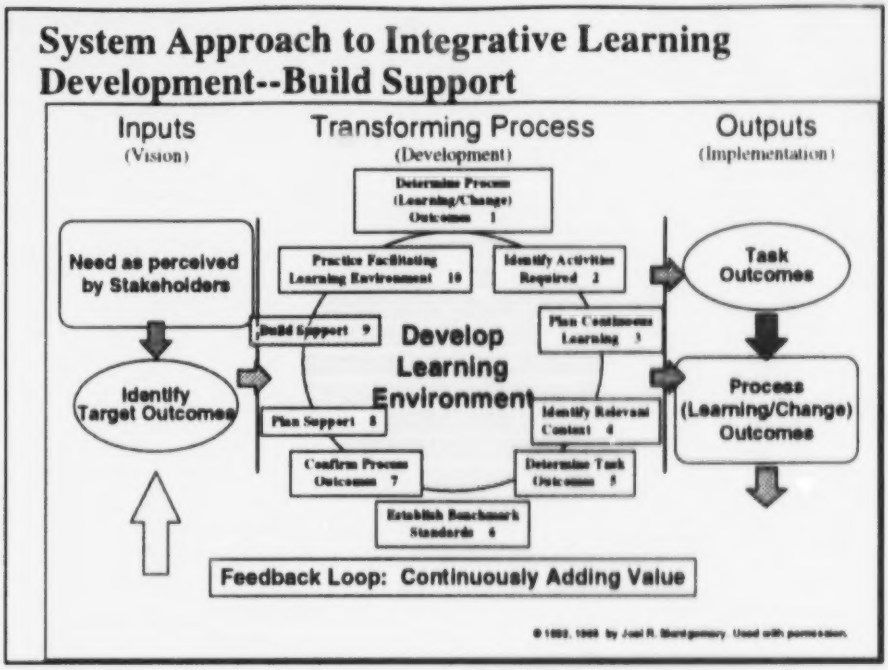
- Benchmarks serve to challenge the learners to produce the task outcomes to a level of quality that assures that they have engaged to the point of building their learning to target levels on the Personal Change Curve.
- Identify objective benchmarks to which task outcomes can be mapped.
- Make sure the learners and faculty use the same benchmark standards to review progress toward and completion of the task outcomes.
- Provide a range from acceptable to excellent.
- Keep benchmark standards generic to support multiple acceptable outcomes.



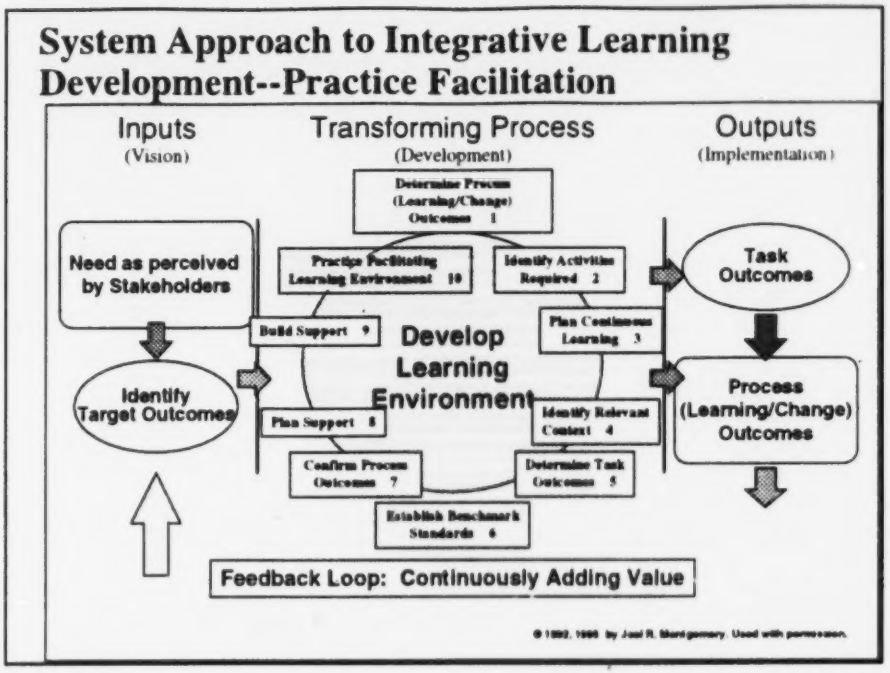
- Revisit all design components to be sure that the design supports the process outcomes desired.
- Are all target outcomes supported by the original process outcomes?
- Will engaging in the activities lead to accomplishment of process outcomes?
- Have the activities been sequenced appropriately?
- How will continuous learning be supported?
- Is the context relevant?
- Do activities and learning in the context lead to the task outcomes identified?
- Are benchmark standards clear and objective?
- Will producing the task outcomes and monitoring learning and process lead to the process outcomes?
- Revise all interconnected aspects of the design as needed.



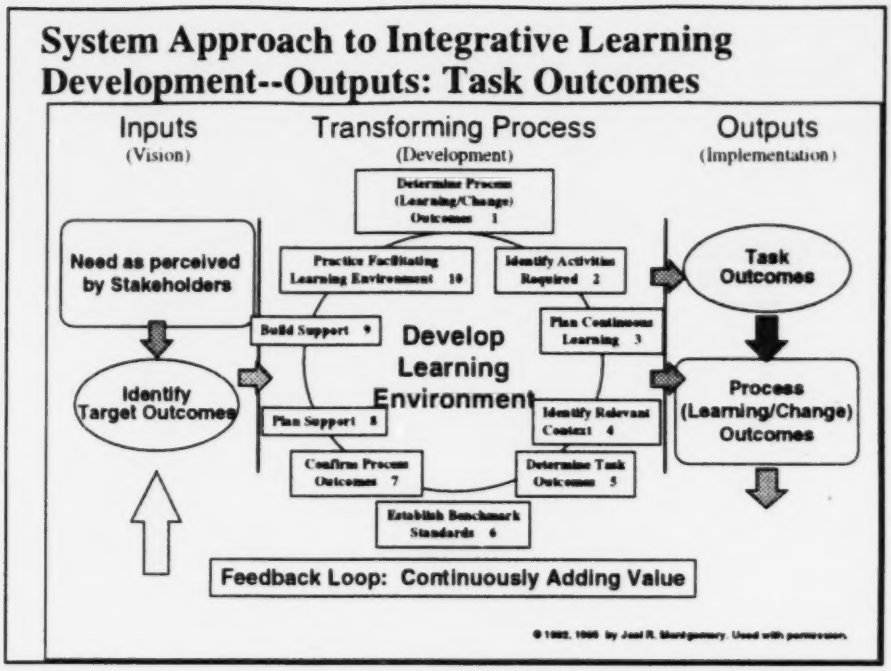
- What support will learners need "just in time" to be able to engage in the activities and to accomplish the desired task and process outcomes?
- How can "authentic" resources used on the job be made available during the learning experience?
- How can we think "out of the box" to provide resources beyond apparent limits?
- How can we make sure resources provided are also available and applicable on the job?
- EXAMPLES: Coaches, conference calls, participant binders, videos, multi-media products, performance support systems, e-mail.
- Use the activities as the focus for support planning.
- The final aspect of this step is to build a plan for the work including what support needs to come first, who will be responsible, what support pieces are interrelated, etc.



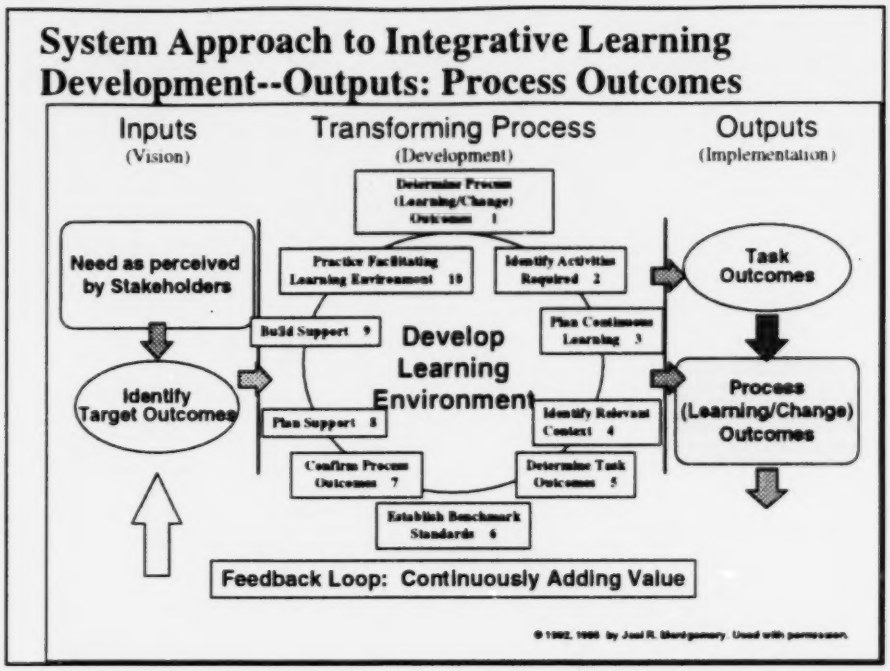
- Key Success Factor: Learning Coaches frequently play a key role in the success of Integrative Learning Environments.
- Resources need to be redundant, flexible, and accommodate a range of learner entry skills.
- Learners need to know how, why, and when to access resources (human, print-based, computer, etc...)
- Resources need to support accomplishment of both task and process outcomes.
- Learners need to "pull" from resources what they need when they need it.
- Resources need to represent those available in the work environment.
- Building the resources means to have the appropriate resources assembled and available at the time the learning experience is scheduled.



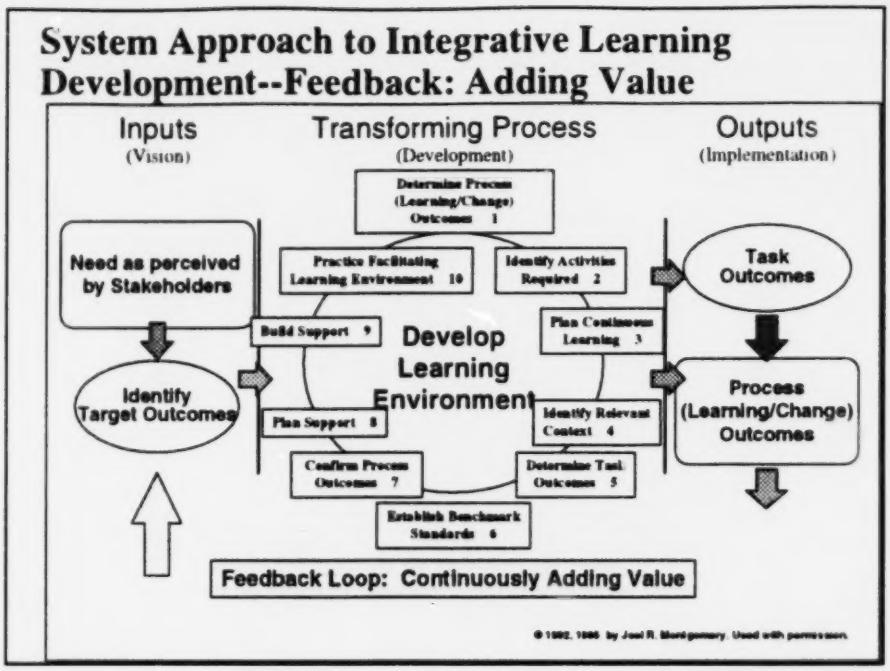
- Frequent practice of integrated parts of the design confirms its effectiveness and allows for upgrades of the learning experience during development.
- An early practice of the design by a sample of the targeted learners will confirm both its effectiveness and the support required.
- As the design unfolds, completed pieces and pieces in development can be practiced together.
- Target outcomes and performance levels on the Personal Change Curve, task and process outcomes, and the components of the learning environment can be reviewed and revised as needed.



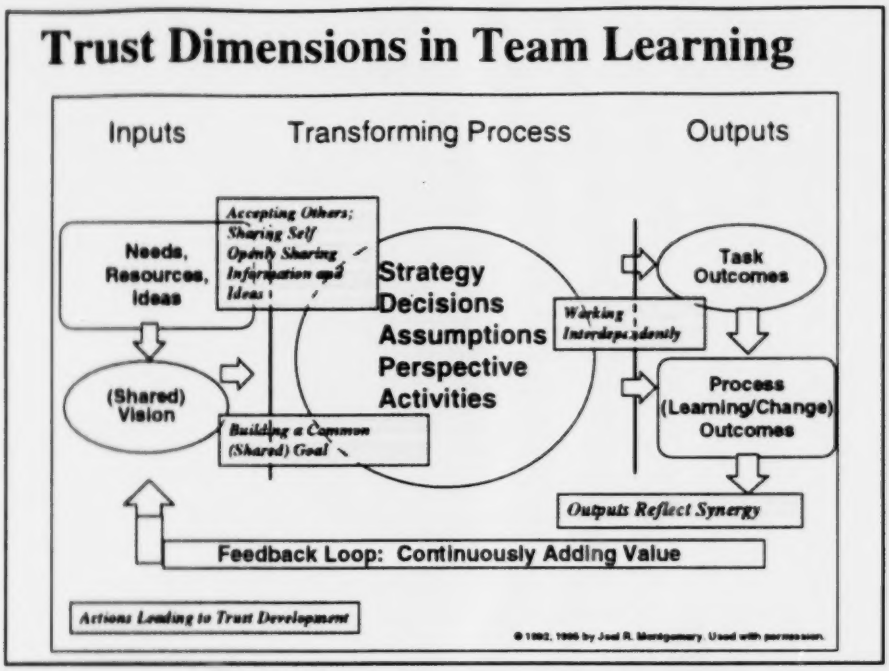
- It is important for the development team and the faculty (learning coaches, practice coaches, etc.) to match the task outcomes actually produced during the learning experience with the benchmarks and to observe and to solicit feedback to ensure that participants have the support required to produce the task outcomes to the standards expected within the time allowed.



- Process Outcomes also need to be monitored during the learning experience so that the development team and the faculty (learning coaches, practice coaches, etc.) can be sure that the process outcomes are reached to the level desired during the actual learning experience.
- It is also important to monitor that the learning environment is "learning safe," supportive, and authentic to the context in which the target outcomes will be used while keeping in mind the "learning safe" and supportive requirements.



- As learners complete the learning experience, validate accomplishment of the target outcomes to the desired levels on the Personal Change Curve and/or match task and process outcomes with target outcomes to identify required revisions to any components or to the design as a whole.
- Be sure that reported accomplishment of the target outcomes at the specific level on the Personal Change Curve matches Stakeholder expectations.
- Be sure that the target outcomes at those performance levels meet the needs of the learners and the job.
- Monitor learning and performance improvement suggestions for future development.
- Use quantitative and qualitative surveys to assess effectiveness of learning on performance on the job.
- A Lotus Notes mail-in database with surveys tied to target outcomes and to the Personal Change Curve can be used to get Stakeholders expectations in advance and feedback from participants (and their supervisors) 7-days after, 3 months after, and 6 months after completing the learning experience.



- The boxes in *italics* represent actions taken by the learners that lead to trust development . Effective trust development is reflected by synergy in the outputs.
- This process will be experienced by participants in the learning experience and will be mirrored in the design process experienced by the development team.
- Paying attention to the trust level currently being experienced, and matching that trust level with the appropriate activity, will greatly facilitate the development of trust and reflect synergy in the team's outputs.

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